

Title (en)  
Bi-stable self-adjusting actuator mechanism

Title (de)  
Bistabile selbstnachstellende Betätigungsseinrichtung

Title (fr)  
Dispositif de commande bistable auto-réglable

Publication  
**EP 0886285 A3 20000419 (EN)**

Application  
**EP 98110890 A 19980615**

Priority  
US 87810797 A 19970618

Abstract (en)  
[origin: EP0886285A2] An electrically operated actuator mechanism for remote locking and unlocking of a door. The moveable bolt is coupled to a solenoid armature for movement in a guide which is registered against the door in the closed position. The solenoid coil bobbin is stationary and the pole frame including a magnet, bolt guide and bolt are slidable thereon for locating the bolt guide against the door at installation. A spring biases the bolt into engagement with the door. Upon coil energization in one direction, the magnetic flux of the coil and magnet are sufficient to move the armature and retract the bolt unlocking the door. Upon de-energization of the solenoid coil the magnet holds the armature and bolt in the unlocked position. Upon subsequent re-energization of the coil in the opposite direction, the magnet flux is neutralized and the spring returns the armature and bolt to the locked position. The actuator is particularly suitable for automotive fuel filler access door locking/unlocking applications. <IMAGE>

IPC 1-7

**H01F 7/16; H01F 7/122**

IPC 8 full level

**B60K 15/05** (2006.01); **E05B 47/02** (2006.01); **E05B 65/12** (2006.01); **H01F 7/16** (2006.01); **E05B 53/00** (2006.01); **H01F 7/122** (2006.01)

CPC (source: EP US)

**B60K 15/05** (2013.01 - EP US); **E05B 47/0002** (2013.01 - EP US); **E05B 47/026** (2013.01 - EP US); **E05B 79/20** (2013.01 - EP US);  
**E05B 83/34** (2013.01 - EP US); **H01F 7/1615** (2013.01 - EP US); **B60K 2015/0538** (2013.01 - EP US); **E05B 47/0004** (2013.01 - EP US);  
**H01F 7/122** (2013.01 - EP US)

Citation (search report)

- [A] US 4660012 A 19870421 - BONNIAU MICHEL [FR], et al
- [A] US 3206656 A 19650914 - MUSGRAVE DANIEL D

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**EP 0886285 A2 19981223; EP 0886285 A3 20000419; EP 0886285 B1 20021002**; DE 69808380 D1 20021107; DE 69808380 T2 20030710;  
ES 2182183 T3 20030301; JP H1181767 A 19990326; US 5936500 A 19990810

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